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L13: Entry 17 of 17.

File: USPT

Apr 4, 2000

US-PAT-NO: 6047234

DOCUMENT-IDENTIFIER: US 6047234 A

TITLE: System and method for updating, enhancing or refining a geographic database

using feedback

DATE-ISSUED: April 4, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Cherveny; Kevin Wilmington IL

Crane; Aaron Palatine IL

Kaplan; Lawrence M. Chicago IL Jasper; John Arlington Hts IL

Shields; Russell Chicago IL

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Navigation Technologies Corporation Rosemont IL . 02

APPL-NO: 08/951767 [PALM]
DATE FILED: October 16, 1997

INT-CL-ISSUED: [07] G06F 165/00

INT-CL-CURRENT:

TYPE IPC DATE

CIPS <u>G01</u> <u>C</u> <u>21/26</u> 20060101 CIPS <u>G08</u> <u>G</u> <u>1/0969</u> 20060101

US-CL-ISSUED: 701/200; 701/207, 701/208, 701/212, 701/214, 340/988, 340/990 US-CL-CURRENT: 701/200; 340/988, 340/990, 701/207, 701/208, 701/212, 701/214

FIELD-OF-CLASSIFICATION-SEARCH: 701/200, 701/207, 701/208, 701/212, 701/214,

701/213, 340/988, 340/990, 340/995

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4982332	January 1991	Saito et al.	364/449
5146219	September 1992	Zechnall	
5243528	September 1993 ·	Lefebvre	701/207
5315295	May 1994	Fújii	
5731978	March 1998	Tamai et al.	701/201
<u>5828585</u>	October 1998	Welk et al.	701/213
5933100	August 1999	Golding	

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO PUBN-DATE COUNTRY CLASS 19525291 C1 December 1996 DE

ART-UNIT: 361

PRIMARY-EXAMINER: Cuchlinski, Jr.; William A.

ASSISTANT-EXAMINER: Arthur; Gertrude

ATTY-AGENT-FIRM: Kozak; Frank J. Kaplan; Lawrence M.

ABSTRACT:

A system for updating, enhancing and/or refining a geographic database. A geographic database includes data representing physical features in the geographic region, and, optionally, attributes of such features. The system includes a plurality of data collecting sensors. Each of the data collecting sensors is installed in a separate one of a plurality of vehicles each of which is capable of traveling on roads in a geographic region. Each of the data collecting sensors provides outputs indicative of one or more features in the geographic region as the vehicle in which it is installed travels on the roads in the geographic region. A computer program executes a feedback process on the geographic database using the outputs of the data collecting sensors. A first part of the feedback program compares the outputs of the data collecting sensors to the data identifying the physical features and provides results representative of the comparisons. A second part of the feedback program is responsive to the results from the first part and determines the significance of the comparisons. A third part of the feedback program modifies the data in the geographic database based upon the significance determined by the second part of the program. The data in the geographic database representing physical features in the geographic region are updated, enhanced, or refined based upon the significance determined by the feedback program. The data which has been updated, enhanced, or refined, is used to provide updated, enhanced, or refined data in end-user vehicles, some of which may include the vehicles in which data collecting sensors have been installed. Sensors in end-users' vehicles are calibrated to high levels of accuracy using the data which has been updated, enhanced or refined using a feedback process. Further, an out-of-calibration sensor in an end-user's vehicle is detected and re-calibrated using the data which has been updated, enhanced or refined using a feedback process. Using a feedback process, levels of confidence are assigned to data in the geographic database

representing physical features in the geographic region, thereby enabling the data to be used for purposes requiring high levels of confidence.

34 Claims, 41 Drawing figures

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First Hit Fwd Refs

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☐ Generate Collection Print

L13: Entry 15 of 17

File: USPT

Jul 27, 2004

US-PAT-NO: 6768944

DOCUMENT-IDENTIFIER: US 6768944 B2

TITLE: Method and system for controlling a vehicle

DATE-ISSUED: July 27, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Breed; David S. Boonton Township, Morris County NJ
Johnson; Wendell C. Signal Hill CA
DuVall; Wilbur E. Kimberling City MO

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Intelligent Technologies International, Denville NJ 02

APPL-NO: 10/216633 [PALM]
DATE FILED: August 9, 2002

PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS This application is a continuation in part of U.S. patent application Ser. No. 10/118,858 filed Apr. 9, 2002. This application is related to, on the grounds that it includes common subject matter, U.S. patent application Ser. No. 09/177,041 filed Oct. 22, 1998, now U.S. Pat. No. 6,370,475, U.S. patent application Ser. No. 09/679,317 filed Oct. 4, 2000, now U.S. Pat. No. 6,405,132, and U.S. patent application Ser. No. 09/909,466 filed Jul. 19, 2001. Both of these patents are incorporated by reference herein.

INT-CL-ISSUED: [07] G01C 23/00, G06F 19/00

INT-CL-CURRENT:

TYPE IPC DATE

CIPS <u>G01</u> <u>C</u> <u>23/00</u> 20060101 CIPS <u>G06</u> <u>F</u> <u>19/00</u> 20060101

US-CL-ISSUED: 701/301; 213/36 US-CL-CURRENT: 701/301; 213/36

FIELD-OF-CLASSIFICATION-SEARCH: 701/301, 701/208, 701/211, 701/36, 701/213, 701/216, 701/220, 342/357.06, 342/357.09, 342/357.14, 348/118 See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL

Clear

Search Selected

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
3702477	November 1972	Brown	342/451
5177685	January 1993	Davis et al.	364/443
5332180	July 1994	Peterson et al.	246/3
5381338	January 1995	Wysocki et al.	364/449
5504482	April 1996	Schreder	340/995
5570087	October 1996	Lemelson	340/870.05
5617317	April 1997	Ignagni	701/215
<u>5760737</u>	June 1998	Brenner	342/357.02
5841367	November 1998	Giovanni	340/903
5890083	March 1999	Franke et al.	701/45
<u>5926117</u>	July 1999	Gunji et al.	340/988
5983161	November 1999	Lemelson et al.	701/301
6014608	January 2000	Seo	701/207
6311129	October 2001	Lin	701/214
6370475	April 2002 .	Breed et al.	701/301
6405132	June 2002	Breed et al.	701/301
6453238	September 2002	Brodie et al.	701/216
6459990	October 2002	McCall et al.	701/220
6516273	February 2003	Pierowicz et al.	701/301
6560535	May 2003	Hohman et al.	701/213
2003/0025597	February 2003	Schofield	340/435
2003/0112132	June 2003	Trajkovic et al.	340/435
	FOREIGN PAT	ENT DOCUMENTS	a.

OTHER PUBLICATIONS

COUNTRY

WO

CLASS

SRI International, Centimeter-Level GPS for Highway Systems, J.W. Sinko et al., Jul., 1998.

PUBN-DATE

July 2001

FOREIGN-PAT-NO

0150088

SRI International, An Evolutionary Automated Highway System Concept Based on GPS, J.W. Sinko, Sep., 1996 (p. 5, second column to p. 7).

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V. Morellas et al., Preview Based Control of a Tractor Trailer Using DGPS for

Preventing Road Departure Accidents, 1998 IEEE International Conference on Intelligent Vehicles, pp. 797-805.

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- H. Weinberg, MEMS Sensors Are Driving the Automotive Industry, Sensors, Feb. 2002.
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- D. Singh et al., Autonomous Vehicle Using WADGPS, Proceedings of Intelligent Vehicles '95 Symposium, Sep. 25-26, 1995, pp. 370-375.

ART-UNIT: 3661

PRIMARY-EXAMINER: Zanelli; Michael J.

ATTY-AGENT-FIRM: Roffe; Brian

ABSTRACT:

Control system and method for controlling a vehicle or a component of a vehicle in which an inertial reference unit includes accelerometers and gyroscopes which provide data on vehicle motion and a processor processes the data and controls the vehicle or the component of the vehicle based thereon. Movement of the vehicle may be controlled via control over servos, such as a servo associated with the braking system, a servo associated with the drive train or throttle and a servo associated with the steering system. A display to the driver can also be controlled by the processor to provide data on vehicle motion or data or information derived from the data on vehicle motion. Optionally, a Kalman filter is coupled to the processor for optimizing the data on vehicle motion from the inertial reference unit.

37 Claims, 25 Drawing figures

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Freeform Search

D	US Pre-Grant Publication Full-Text Database US Patents Full-Text Database US OCR Full-Text Database EPO Abstracts Database JPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins		
Т	10/648067		
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<i>OP=0</i> 1.21	L19 and ((data\$ with string\$) and(trust\$ or confiden\$ or reliab\$))	2	L21
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	114 or 117 or 118	159	L19
<i>DB</i> = <u>L18</u> .	### PGPB, USPT; THES=ASSIGNEE; PLUR=YES; OP=OR [5272638 5951620 6516273 6311129 5570087 6144916 5926117 [6819268 5812069 6560535 6014608 5890083 6768944 6061625 [6680674 6298302 20040098191 6785551 6370475 5774824 20010002451 [5699255 5617317 6178374 4982332 5506584 5146219 5177685 [6326903 5828585 6459990 5214793 5128669 5900825 5841367 [6754485 3702477 5182555 5485161 5440484 5760737 6405132 [5566072 5315295 5699056 20030025597 5933100 20030112132 6038495 [5243528 4013994 5922036 5504482 6173231 4989151 6615137 [5907293 5983161 20020121989 6792351 6453238 6759970 6006161 [5948042 6154152 6868331 5164904 5374933 5488559 5614895 [6720920 5961571 5844505 5543789 5483453 5731978 6072396 [5450329 5381338 5046011 5332180)![PN]	. 81	<u>L18</u>

<u>L17</u>	("20020198632" "6516267" "6047234" "6853913" "6768944" "7085637" "7110880")[PN]	7	<u>L17</u>
<u>L16</u>	("20050137786" "20050134440" "20050093720" "20050149259" "20070021915" "20060206256" "20040088110" "20030125871" "20050060069" "20030191568" "20020198632" "6516267" "6047234" "6853913" "6768944" "7085637" "7110880")[PN]	17	<u>L16</u>
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<u>L14</u>	("20050137786" "20050134440" "20050093720" "20050149259" "20070021915" "20060206256" "20040088110" "20030125871" "20050060069" "20020198632" "6516267" "6047234" "6853913" "6768944" "7085637" "7110880")[URPN]	76	<u>L14</u>
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<u>L13</u>	L12 and 701/\$.ccls.	17	<u>L13</u>
<u>L12</u>	(freshness\$ with (information or data)) and database and reliab\$ and (data with (location\$ or position\$ or address\$)) and navigat\$	69	<u>L12</u>
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<u>L7</u>	(freshness\$ with (information or data)) and (data near2 string\$) and database and reliab\$ and (data with (location\$ or position\$ or address\$)) and @ad<=20020826	. 3	<u>L7</u>
<u>L6</u>	L5 and gps	8	<u>L6</u>
<u>L5</u>	L4 and vehicle	18	<u>L5</u>
<u>L4</u>	L3 and map\$	20	L4
<u>L3</u>	L2 and database	24	<u>L3</u>
<u>L2</u>	L1 and navigation	43	<u>L2</u>
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☐ 1. Document ID: US 7072764 B2

L21: Entry 1 of 2

File: USPT

Jul 4, 2006

US-PAT-NO: 7072764

DOCUMENT-IDENTIFIER: US 7072764 B2

TITLE: Real time high accuracy geospatial database for onboard intelligent vehicle

applications

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20020184236 A1

December 5, 2002

Full	Title	Citation	Front	Review	Classification	Date	Reference	40 10 10 10	Claima	80m4C	[+rane
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☐ 2. Document ID: US 5177685 A

L21: Entry 2 of 2

File: USPT

Jan 5, 1993

US-PAT-NO: <u>5177685</u>

DOCUMENT-IDENTIFIER: US 5177685 A

** See image for <u>Certificate of Correction</u> **

TITLE: Automobile navigation system using real time spoken driving instructions

Full Title Citation Front Review Class	rnication Cate Berereno:	÷		ess Clai	me Kind	C Cra
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L21: Entry 2 of 2

File: USPT

Jan 5, 1993

US-PAT-NO: 5177685

DOCUMENT-IDENTIFIER: US 5177685 A

** See image for Certificate of Correction **

TITLE: Automobile navigation system using real time spoken driving instructions

DATE-ISSUED: January 5, 1993

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE C

COUNTRY

Davis; James R.

Milton '

MA MA

ASSIGNEE-INFORMATION:

Schmandt; Christopher M.

NAME

CITY

North Cambridge

STATE ZIP CODE COUNTRY TYPE CODE

Massachusetts Institute of Technology Cambridge MA

02

APPL-NO: 07/565274 [PALM]
DATE FILED: August 9, 1990

INT-CL-ISSUED: [05] G01C 21/00

INT-CL-CURRENT:

TYPE IPC

DATE

CIPS <u>B60</u> <u>R</u> <u>16/02</u> 20060101

CIPS <u>G01</u> <u>C</u> <u>21/34</u> 20060101

CIPS G01 C 21/36 20060101

US-CL-ISSUED: 364/443; 340/988, 364/449, 364/453

US-CL-CURRENT: 455/456.5; 340/988, 701/209, 701/211, 701/220

FIELD-OF-CLASSIFICATION-SEARCH: 340/988, 340/989, 340/990, 340/995, 364/443,

364/444, 364/449, 364/450, 364/453, 364/436

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

	4139889	February 1979	Ingels	340/989 X
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	4734863	March 1988	Honey et al.	340/988 X
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	4939662	July 1990	Nimura et al.	340/990 X
□ ·	4951211	August 1990	De Villeroche	364/444
	4954958	September 1990	Savage et al.	364/444
	4984168	January 1991	Neukrichner et al.	364/449
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	5021961	June 1991	Ross et al.	340/990 X
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"Synthetic Speech for Real Time Direction Giving", C. M. Schmandt et al., IEEE Transactions on Consumer Electronics, 35(3):649-653, Aug. 1989.

"The Back Seat Driver: Real Time Spoken Driving Instructions", J. R. Davis et al., Proceedings of the IEEE Vehicle Navigation and Information Systems Conference, Toronto, Canada, Sep. 1989.

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"Digital Map Dependent Functions of Automatic Vehicle Location Systems", by C. B. Harris et al., IEEE Position and Location Symposium, pp. 79-87, 1988, IEEE CH2675-7.

"Digital Maps on Compact Discs", by H. J. G. M. Benning, Technical Paper Series 860125, Society of Automobile Engineers, 1986.

"Eva: An Electronic Traffic Pilot for Motorists", by O. Pilsak, Technical Papers Series 860346, Society of Automotive Engineers, 1986.

"Digital Map Data Bases for Autonomous Vehicle Navigation Systems", by E. P. Neukirchner et al., IEEE Position and Location Symposium, pp. 320-324, 1986, IEEE 86CH2365-5.

"Applications of the Compact Disc in Car Information and Navigation Systems", by M. L. G. Thoone et al., Technical Papers Series 840156, Society of Automotive Engineers, 1984:

"On Board Computer System for Navigation, Orientation, and Route Optimization", by P. Haeussermann, Technical Paper Series 840483, Society of Automotive Engineers, 1984.

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"Extending Low Cost Land Navigation Into Systems Information Distribution and Control", by S. K. Honey et al., IEEE Position and Locations Symposium, pp. 439-444, 1986, IEEE 86CH2365-5.

"Map Matching Augmented Dead Reckoning", by W. B. Zavoli et al., Proceedings of the 35th IEEE Vehicular Technology Conference, pp. 359-444, 1986, IEEE CH2308-5.
"Automated Provision of Navigation Assistance to Drivers", by Matthew McGranaghan et al., The American cartographer 14(2):121-138, 1987.

ART-UNIT: 234

PRIMARY-EXAMINER: Lall; Parshotam S.

ASSISTANT-EXAMINER: Pipala; Edward

ATTY-AGENT-FIRM: Choate, Hall & Stewart

ABSTRACT:

An automobile navigation system which provides spoken instructions to the driver of an automobile to guide the driver along a route is disclosed. The heart of the system is a computing apparatus comprising a map database, route finding algorithms, a vehicle location system, discourse generating programs, and speech generating programs. Driver input means allows the driver to enter information such as a desired destination. The route finding algorithms in the computer apparatus calculate a route to the destination. The vehicle location system accepts input from a position sensor which measures automobile movement (magnitude and direction) continuously, and using this data in conjunction with the map database, determines the position of the automobile. Based on the current position of the automobile and the route, the discourse generating programs compose driving instructions and other messages according to a discourse model in real time as they are needed. The instructions and messages are sent to voice generating apparatus which conveys them to the driver.

58 Claims, 5 Drawing figures

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Hit List

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Search Results - Record(s) 1 through 10 of 17 returned.

☐ 1. Document ID: US 20070021915 A1

L13: Entry 1 of 17

File: PGPB

Jan 25, 2007

PGPUB-DOCUMENT-NUMBER: 20070021915

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20070021915 A1

TITLE: Collision Avoidance Methods and Systems

PUBLICATION-DATE: January 25, 2007

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY Breed; David S. Boonton Township NJ DuVall; Wilbur E. Reeds Spring MO US Johnson; Wendell C. Kaneohe ΗI US Lukin; Kostyantyn Alexandrovich Kharkov UA

US-CL-CURRENT: 701/301

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	#itachmente	Claims	Kimbo	Errand Er-

☐ 2. Document ID: US 20060206256 A1

L13: Entry 2 of 17

File: PGPB

Sep 14, 2006

PGPUB-DOCUMENT-NUMBER: 20060206256

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060206256 A1

TITLE: Traffic information system

PUBLICATION-DATE: September 14, 2006

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY
Kumagai; Masatoshi Hitachi JP
Fushiki; Takumi Paris FR
Yokota; Takayoshi Hitachioota JP
Kimita; Kazuya Hitachi JP

US-CL-CURRENT: 701/117; 340/934

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Trave C-

☐ 3. Document ID: US 20050149259 A1

L13: Entry 3 of 17

File: PGPB

Jul 7, 2005

PGPUB-DOCUMENT-NUMBER: 20050149259

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050149259 A1

TITLE: System and method for updating, enhancing, or refining a geographic database

using feedback

PUBLICATION-DATE: July 7, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Cherveny, Kevin	Wilmington	IL	US
Crane, Aaron	Palatine	IL	US
Kaplan, Lawrence M.	Chicago	IL	US
Jasper, John	Arlington Hts.	IL	US
Shields, Russell	Chicago	IL	US ·

US-CL-CURRENT: 701/208; 340/995.14, 701/200, 701/201

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L13: Entry 4 of 17

File: PGPB

Jun 23, 2005

PGPUB-DOCUMENT-NUMBER: 20050137786

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050137786 A1

TITLE: Communication method and arrangement

PUBLICATION-DATE: June 23, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Breed, David S.	Boonton Township	NJ	US
DuVall, Wilbur E.	Kimberling City	MO	US
Johnson, Wendell C.	Kaneohe	HI	US
Lukin, Kostyantyn Alexandrovich	Kharkov		UA
Konovalov, Vladymyr Michailovich	Kharkov		UA

US-CL-CURRENT: 701/200

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims 1990 Fram (F-

☐ 5. Document ID: US 20050134440 A1

L13: Entry 5 of 17

File: PGPB

Jun 23, 2005

PGPUB-DOCUMENT-NUMBER: 20050134440

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050134440 A1

TITLE: Method and system for detecting objects external to a vehicle

PUBLICATION-DATE: June 23, 2005

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Breed, David S.

Boonton Township

NJ

US

US-CL-CURRENT: 340/435; 342/70, 701/45

Full	Title	Citation	Front	Review	Classification	Crate	Reference	Sequences	Attachmenta	Claima	10040	ferano, fe-
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☐ 6. Document ID: US 20050093720 A1

L13: Entry 6 of 17

File: PGPB

May 5, 2005

PGPUB-DOCUMENT-NUMBER: 20050093720

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050093720 A1

TITLE: Traffic information providing system and car navigation system

PUBLICATION-DATE: May 5, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Yamane, Kenichiro	Hitachi		JP ·
Fujiwara, Junsuke	Hitachi		JP
Endo, Yoshinori	Mito		JP
Machii, Kimiyoshi	Hitachi		JP
Kumagai, Masatoshi	Hitachi		JP
Yokota, Takayoshi	Hitachiota		JP
Matsuo, Shigeru	Hitachinaka		JP

US-CL-CURRENT: 340/995.13; 701/117

Full	Titl∈	Citation	Front	Review	Olassitication	(+ate	Reference	Sequences	Attachmente	Stains.	k)00(C)	Erraye De

☐ 7. Document ID: US 20050060069 A1

L13: Entry 7 of 17

File: PGPB

Mar 17, 2005

May 6, 2004

PGPUB-DOCUMENT-NUMBER: 20050060069

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050060069 A1

TITLE: Method and system for controlling a vehicle

PUBLICATION-DATE: March 17, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Breed, David S. Boonton Township NJ US
DuVall, Wilbur E. Kimberling City MO US
Johnson, Wendell C. Kaneohe HI US

US-CL-CURRENT: 701/29; 701/200

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims Root Graw Ge

File: PGPB

□ 8. Document ID: US 20040088110 A1

PGPUB-DOCUMENT-NUMBER: 20040088110

PGPUB-FILING-TYPE: new

L13: Entry 8 of 17

DOCUMENT-IDENTIFIER: US 20040088110 A1

TITLE: Method and apparatus for displaying navigation information

PUBLICATION-DATE: May 6, 2004

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Suzuki, Keizo Yokohama-city JP

US-CL-CURRENT: 701/211; 340/995.14, 701/200

Full Title Citation Front Review Classification Cate Reference Sequences Attachments Claims Route Draw De

☐ 9. Document ID: US 20030191568 A1

L13: Entry 9 of 17 File: PGPB Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030191568

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030191568 A1

TITLE: Method and system for controlling a vehicle

PUBLICATION-DATE: October 9, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

Breed, David S.

Boonton Township

NJ

US

US-CL-CURRENT: 701/36; 340/438, 701/213

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachmenta	Claims	10040	France Ex
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	10.	Docum	ent ID	: US 2	003012587	1 A1						
L13:	Entry	10 of	17				File:	PGPB		Jul	3,	2003

PGPUB-DOCUMENT-NUMBER: 20030125871

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030125871 A1

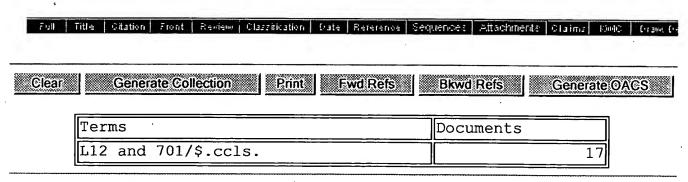
TITLE: System and method for updating, enhancing, or refining a geographic $\underline{\text{database}}$ using feedback

PUBLICATION-DATE: July 3, 2003

INVENTOR-INFORMATION:

CITY	STATE	COUNTRY
Wilmington	IL	US
Palatine	IL	US
Chicago	IL	US
Arlington Hts.	IL	US
Chicago	IL	US
1	Wilmington Palatine Chicago Arlington Hts.	Wilmington IL Palatine IL Chicago IL Arlington Hts. IL

US-CL-CURRENT: 701/208



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Search Results - Record(s) 11 through 17 of 17 returned.

☐ 11. Document ID: US 20020198632 A1

L13: Entry 11 of 17

File: PGPB

Dec 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020198632

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020198632 A1

TITLE: Method and arrangement for communicating between vehicles

PUBLICATION-DATE: December 26, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY Breed, David S. Boonton Township NJ US DuVall, Wilbur E. Kimberling City MO US Johnson, Wendell C. Signal Hill CA US Lukin, Kostyantyn Alexandrovich Kharkov UΑ Konovalov, Vladymyr Michailovich Kharkov UΑ

US-CL-CURRENT: <u>701/1</u>; <u>701/213</u>

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KimiC	Errane.
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☐ 12. Document ID: US 7110880 B2 🖔

L13: Entry 12 of 17

File: USPT

Sep 19, 2006

US-PAT-NO: 7110880

DOCUMENT-IDENTIFIER: US 7110880 B2

TITLE: Communication method and arrangement

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20050137786 A1

June 23, 2005

Full Title Citation Front Review Classification Cate Reference Company Claims Kind Company Com

☐ 13. Document ID: US 7085637 B2

L13: Entry 13 of 17

File: USPT

Aug 1, 2006

US-PAT-NO: 7085637

DOCUMENT-IDENTIFIER: US 7085637 B2

TITLE: Method and system for controlling a vehicle

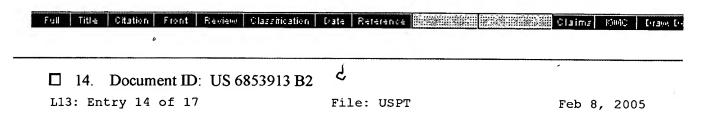
PRIOR-PUBLICATION:

DOC-ID

DATE

US 20050060069 A1

. March 17, 2005

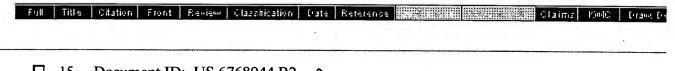


US-PAT-NO: 6853913

DOCUMENT-IDENTIFIER: US 6853913 B2

TITLE: System and method for updating, enhancing, or refining a geographic database

using feedback



☐ 15. Document ID: US 6768944 B2 • •

L13: Entry 15 of 17

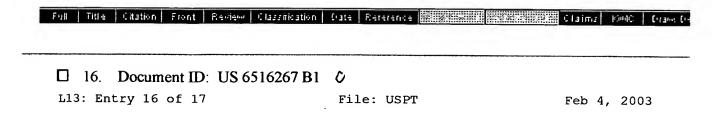
File: USPT

Jul 27, 2004

US-PAT-NO: 6768944

DOCUMENT-IDENTIFIER: US 6768944 B2

TITLE: Method and system for controlling a vehicle



US-PAT-NO: 6516267

DOCUMENT-IDENTIFIER: US 6516267 B1

TITLE: System and method for updating, enhancing or refining a geographic database

using feedback



☐ 17. Document ID: US 6047234 A C

L13: Entry 17 of 17

File: USPT

Apr 4, 2000

US-PAT-NO: 6047234

DOCUMENT-IDENTIFIER: US 6047234 A

TITLE: System and method for updating, enhancing or refining a geographic database

using feedback

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